

REMARKS

The Official Action mailed May 11, 2006, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on November 14, 2003; January 22, 2004; September 9, 2005; and February 14, 2006.

Claims 1-21 are pending in the present application, of which claims 1, 3, 5, 8, 11, 14 and 18 are independent. Claims 1, 3, 5, 8, 11, 14 and 18 have been amended to better recite the features of the present invention. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action rejects claims 1-21 as obvious based on the combination of JP 11-204433 to Kensaku YANO (referred to as "Kensaku" in the Official Action) and one or more of the following: U.S. Patent Application Publication No. 2003/0031214 to Tanaka, U.S. Patent No. 5,432,122 to Chae, U.S. Patent No. 5,147,826 to Liu and U.S. Patent No. 6,027,960 to Kusumoto. It is noted that the Official Action uses the header "Claim Rejections - 35 USC § 103" for all the rejections; therefore, it is believed that the statement at page 2, line 10, i.e. that claims 1-7 are rejected under § 102(b), is in error and that § 103 was intended. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the

prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims, as amended. Independent claims 1, 3, 5, 8, 11, 14 and 18 have been amended to recite that ultrasonic vibration is applied to a substrate through a chuck during irradiating a laser beam and that the substrate is floated by the chuck holding an end portion of the substrate during irradiating the laser beam, which is supported in the present specification, for example, at page 13, lines 1-6, and by Figures 1-8 and 14. For the reasons provided below, Kensaku and one or more of Tanaka, Chae, Liu and Kusumoto, either alone or in combination, do not teach or suggest the above-referenced features of the present invention.


Kensaku appears to teach that a stage is oscillated with an ultrasonic wave and irradiation of a laser beam. Tanaka appears to teach that a substrate is floated by the pressure of jetted gas and a substrate holding mechanism. The Official Action relies on Chae to allegedly teach overlapping a beam of spot lasers (page 3, Paper No. 0506), on Liu to allegedly teach adding a metal element for enhancing crystallization (page 4, Id.), and on Kusumoto to allegedly teach laser annealing in an oxygen atmosphere (page 5, Id.). However, Kensaku and one or more of Tanaka, Chae, Liu and Kusumoto, either alone or in combination, do not teach or suggest that ultrasonic vibration should be

applied to a substrate through a chuck during irradiating a laser beam and that the substrate should be floated by the chuck holding an end portion of the substrate during irradiating the laser beam.

Since Kensaku and one or more of Tanaka, Chae, Liu and Kusumoto do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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